

CODE CHECKSUMS FOR RELOCATABLE CODE

ABSTRACT OF THE DISCLOSURE

A method for determining the integrity of an application program running on a computer system includes the preallocation of memory segments in the data portion for holding tables. Relocation addresses are selected and extracted from relocatable object programs, libraries and modules during translation and inserted into the tables. Additionally, a default address of a subprogram is selected and stored in the data portion. During execution of the application program, a run time reference address of the subprogram is determined and compared with the stored default address. If a match occurs, the reference address is used when performing a checksum of the application program. This occurs even for the situation of non-relocatable code. Otherwise, the reference address and the default address are used to offset the memory contents of relocation addresses stored in the tables for the purposes of performing a security application on the program. The security application has embodiments of code checksum or code decryption.